An Informal Guide to the Thai Script

Casey Miller July 2023

This document is an informal guide to the Thai script and is intended for those interested in learning how to read Thai or improve their speaking ability. It does not attempt to address the Thai script comprehensively, but is only intended to help the reader gain a better foothold in their understanding of the Thai language. This document is also catered towards American English speakers, though the information provided here is by no means inaccessible to speakers of other English varieties. No background of linguistics is assumed and an attempt is made to make the material provided here as accessible as possible.

When learning the Thai script it is important that an *intermediary* system is used. The importance is threefold: (1) a language-agnostic system helps to alleviate the learner from any attachment to the letters in the Latin alphabet, (2) the Thai language has speech sounds which either do not exist in English or are not represented with a unique symbol, (3) the Latin alphabet is not *phonetic*—meaning that characters may or may not represent more than one speech sound. For example, the letter **a** represents different speech sounds in the words *cat* and *father*. The goal of using such an intermediary system is to help the learner achieve the most accurate pronunciation they can, thereby being as interpretable as possible to the Thaispeaking listener; the hope is that it will also help to demystify the Thai writing system in some way or form.

The intermediary system that will be used in this document to combat these points is the International Phonetic Alphabet (IPA). The idea of the IPA is that a single character will represent a single speech sound for all the world's languages. For example, the symbol $/ \int /$ will be used to represent the sounds of **sh** in English, **sch** in German, **ch** in Portuguese, **ş** in Turkish, and so on. The symbol / a / b will be used to represent the **a** in **cat**, but not the **a** in **father**. Likewise, the **a** in **father** will be represented by the symbol / a / b but this symbol will not represent the **a** in **cat**.

In order to denote that symbols should be interpreted as IPA, they are surrounded by forward slashes in the following form: /IPA/. For the sake of readability, the aforementioned forward slashes will be omitted from the tables in this document, however in this case all non-Thai characters should still be interpreted as IPA. Note that some of the symbols used in IPA are taken from the Latin script but should not be interpreted as such.

This document will not require the reader to learn every symbol of the IPA; only the relevant symbols for Thai will be used, which will be explained incrementally and thoroughly. A complete reference guide to the Thai script will be provided at the end of this document.

Consonants

The Thai script does not use *unique* characters. In other words, some speech sounds are represented by more than one character. For example, the consonants $\mathfrak I$ and $\mathfrak I$ both represent the same speech sound. One reason for this can be defined as **sound shifts**—a speech sound in the language began to be pronounced differently over time, possibly converging to an already used speech sound.

In the subsequent tables, a forward slash (/) will be used to group consonants together that represent the same speech sound. An asterisk will be used to mark consonants that are either rare or obsolete.

For reasons explained in later sections, it is beneficial to partition the consonants in Thai into three classes: high, mid, and low. We begin first with the high class.

High Class Consonants

The high class consonants are shown in Table 1. The defining phonetic feature of the high class consonants is that they are all produced with **aspiration**—that is, with air coming out of the mouth. This can be felt when a hand is placed in front of the mouth while producing these speech sounds. Some speech sounds are aspirated by default and cannot be produced unaspirated. In Table 1, the speech sounds /s/, /f/, /h/ are examples of this. There are other speech sounds which can be produced either with aspiration *or* without aspiration. For these sounds, a superscripted "h" (h) is used to indicate if it is produced with aspiration. In Table 1, the speech sounds /kh/, /tch/, /th/, /th/

High Class				
ข	k^{h}			
ฉ	îç ^h			
ព / ត្ច*	t ^h			
М	p^{h}			
ส / ศ / ษ	S			
N	f			
ห	h			

Table 1: High Class Consonants. Rare or obsolete characters are marked with an asterisk (*).

 $/k^h/$ — This consonant exists in English as the c in cat or the k in king.

This consonant does not appear in English, but it is similar to the speech sound represented by the letters **ch** in **ch**arter. The difference is that the body of the tongue is placed forward, up against the ridge directly behind the teeth on the roof of the mouth.

 $/t^h/$ — This consonant exists in English as the t in tall.

 $/\mathbf{p}^{h}/$ — This consonant exists in English as the **p** in **p**anther.

/s/ — This consonant exists in English as the s in sad.

/f/ — This consonant exists in English as the f in father.

/h/ — This consonant exists in English as the h in hat.

Mid Class Consonants

Table 2 contains the mid class consonants. In contrast to the high class consonants, the defining feature of the mid class consonants is that they are produced **without aspiration**. This can be difficult for some English speakers because many of these sounds do not appear in English, or, if they do, only in specific contexts. The explanations provided here will attempt to aid the learner in training their mouth to produce these sounds.

For the following speech sounds, the throat should feel closed so that the airway is shut off, though this does not require any strong constriction of the throat. When producing these speech sounds, no aspiration (or minimal aspiration) should be felt coming out of the mouth when a hand is placed in front of it.

The final character, a, acts as a consonant in many cases but actually represents a vowel. However, in some cases it can be used as a silent character to require a syllable to conform to the tone rules of the mid class (hence the inclusion here). This will be discussed in more detail in the later sections.

Mid Class				
ก	k			
จ	îç			
ด / ฎ*	d			
ด / ฏ*	t			
บ	b			
ป	p			
ව	Э			

Table 2: Mid Class Consonants. Rare or obsolete characters are marked with an asterisk (*).

- /k/ This consonant exists in English as the k in sky. Notice that no aspiration occurs when producing the k in sky. In order to isolate this sound, try repeating the sk in sky, continually elongating the distance between the s and the k until you are able to produce the unaspirated /k/ by itself.
- This consonant does not appear in English, but it is similar to the aspirated version found in Table 1. The main difference here is that the throat is closed so that no air escapes the mouth when producing this speech sound.
- /d/ This consonant does not appear in English, but is similar to the d in dog. Here, the tip of the tongue placed on the ridge behind the upper teeth and the throat is closed so that no aspiration escapes the mouth when producing this speech sound.
- /t/ This consonant does not appear in English. The tongue is placed up against the upper, front teeth similar to the th in thin. However, here the tongue is constricted and pushed off the teeth and the throat is closed so that no aspiration escapes the mouth when producing this speech sound.
- /b/ This consonant does not appear in English, but is similar to the b in boy. The main difference is that here, the throat is closed so that no air escapes the mouth when producing this speech sound.
- /p/ This consonant exists in English as the p in spy. Notice that no apsiration occurs when producing the p in spy. In order to isolate this sound, try repeating the sp in spy, continually elongating the distance between the s and the p until you are able to produce the unaspirated /p/ by itself.
- /ɔ/ This speech sound exists in English, however it is actually a vowel. Because of this, it will be explained in more detail in the Vowels section.

Low Class Consonants

The low class is the final class of consonants, yet it is also the largest. The defining phonetic feature of the low class has been lost over time. Luckily, the majority of the low class consonants will be familiar to English speakers.

Low Class							
ค / ฆ*	k^{h}	ม	m	ខ	j		
ช / ฌ*	$\widehat{t}\widehat{\boldsymbol{\varsigma}}^h$	น	n	ล / ฬ*	1		
ท / ฑ* / ฒ*	t ^h	ง	ŋ	ร	r		
พ/ภ	p ^h	ฮ*	h	3	w		
ฟ	f						

Table 3: Low Class Consonants. Rare or obsolete characters are marked with an asterisk (*).

 $/k^h/$ — This consonant exists in English as the c in cat or the k in king.

 $\widehat{/\mathbf{t}\mathbf{c}}^{h}$ / — This consonant does not appear in English, but is identical to the consonant in Table 1.

 $/t^h/$ — This consonant exists in English as the t in tall.

 $/p^h/$ — This consonant exists in English as the **p** in **p**anther.

/f/ — This consonant exists in English as the f in father.

/m/ — This consonant exists in English as the m in map.

/n/ — This consonant exists in English as the **n** in **n**ame.

/ŋ/ — This consonant exists in English as the **ng** in su**ng**. To produce this sound at the beginning of a word, shape the tongue as if to produce a **k** sound, close the throat airway, and produce the **ng** sound out of the nasal cavity.

/h/ — This consonant exists in English as the h in hat.

/j/ — This consonant exists in English as the y in yes.

/1/ — This consonant exists in English as the 1 in laugh.

/r/ — This consonant does not appear in most English varieties. It is identical to the Spanish rolled **r**, as in pe**rr**o. It can also be produced similar to the **tt** in butter. In "informal" speech, the character 5 is can also be produced as /l/.

/w/ — This consonant exists in English as the w in water.

Consonants at the End of a Syllable

Consonants may be pronounced differently when they appear at the end of a syllable. In this document two types of syllables are differentiated: *live* and *dead*. Live syllables end in speech sounds that can be extended. For example, the **m** in **m**atch can be held by the speaker (*mmmm...*). Dead syllables end in speech sounds that cannot be extended. For example, the **p** in **p**anther cannot be extended by the speaker.

Live Syllables

Live syllables end in either a long vowel or one of the consonants below. The majority of these consonants (shown below) are pronounced normally when they appear at the end of the syllable. The exceptions are \mathfrak{a} and \mathfrak{I} , which are pronounced as $/\mathfrak{n}/(\mathfrak{n}$ as in name) at the end of a syllable. Some special cases of \mathfrak{I} will be discussed in later sections.

Dead Syllables

Dead syllables end in a short vowel or one of the consonants below. These consonants are pronounced differently when they appear at the end of a syllable. They are pronounced as **unreleased**—a linguistic term meaning that the mouth is shaped as if the consonant is going to be spoken, but it isn't. The three variants are shown below. Rare or obsolete consonants are omitted.

(1)	ฉถสศษ	muomoumood oo om umuoloocod /t/
(1)	จดตชท	pronounced as an unreleased /t/

Vowels

An observant reader might have noticed that there is no mention of the Thai *alphabet*. That is because the Thai writing system is not an alphabet, but an abugida. In an abugida, consonants hold higher status over vowels. That is to say, vowels cannot appear on their own. One can think of vowels in Thai as *templates*, in which a consonant is placed. A vowel template can feature symbols above, below, before, or after (or some combination thereof) the consonant. Regardless, the consonant is always pronounced first. There is only one exception: when the character $\hat{\mathbf{e}}$ is used as the consonant in a vowel template, it is "silent" and only the vowel is spoken. Thus:

Another feature of Thai phonology is that a difference is made between *short* and *long* vowels. To distinguish long vowels from short vowels, the discritical mark (:) is placed after long vowels. By implication, long vowels are held for slightly longer than short vowels.

In Table 4, the consonant \cap /k/ is used as a placeholder and can be replaced by any consonant(s) in each respective vowel template. Several vowels have a different form in the case that the syllable ends in a consonant, this is shown in the final column labeled "With Final Consonant". Finally, the character @ is used in several vowel templates, however in this case it should not be interpreted as anything more than part of the vowel template itself.

Sho	hort Long			With Consonant	
กะ	ka	กา	ka:	กัก	kak
เกาะ	kə	กอ	kə:		
โกะ	ko	โก	ko:		
ก็	kw	กือ	kw:	ก็ก	kw:k
η	ku	ຖູ	ku:		
เกอะ	kə	เกอ	kə:	เกิก	kə:k
แกะ	kæ	แก	kæ:		
เกะ	ke	เก	ke:	เก็ก	kek
กิ	ki	ก็	ki:		

Table 4: Basic Vowels and their Forms.

- /a/ This vowel appears in English as the a in father.
- /ɔ/ This vowel appears in New England varieties of American English, for example as the aw in dawn. Notice how the back of the tongue lies flat on the bottom of the mouth when producing /a/. Notice also how the back of the tongue is raised when producing the vowel /o/. The vowel /ɔ/ is produced with the back of the tongue being raised above /a/, but below /o/.
- /o/ This vowel exists in English as the o in vote.
- /w/ This vowel does not appear in English. Notice how the lips are rounded and the back of the tongue is raised when producing the vowel /u/. To produce the vowel /w/, start by producing the vowel /u/ and then unround the lips (this can be done by smiling, for example) while maintaining the same tongue height.
- $/\mathbf{u}/$ This vowel appears in English as the **oo** in **pool**.
- /a/ This vowel appears in English as the **a** in illeg**a**l.
- $/\mathbf{e}/$ This vowel appears in English as the **a** in cat.
- /e/ This vowel appears in English as the **a** in made. Can also be pronounced as /ε/ like the **e** in beg.
- /i/ This vowel appears in English as the **ee** in f**ee**t.

Diphthongs

There are several *diphthongs* in Thai. A diphthong is a sequence of two vowels in a syllable. They are labeled in this document as "Close to Open" and "Open to Close", referring to the change in tongue height during the production of the diphthong. Of the diphthongs in Table 5, one of them has a different form when the syllable ends in a consonant. Because the pronunciation of the individual vowels has already been addressed, it is omitted here.

Close t	Close to Open		Open to Close		tween sonants
เกีย	kia	ไก	kai		
เกือ	kwa	ใก	kai		
กัว	kua	เกา	kau	กัก	kuak

Table 5: Diphthongs and their Forms.

Tone Rules

The reason for dividing the consonants into three classes can now be addressed. The tone of a syllable can be determined by four things:

- (1) the class of the initial consonant
- (2) the tone mark (if there is one)
- (3) the final letter (live or dead syllable)
- (4) the length of the vowel

Having already addressed (1), (3), and (4), the tone marks can be addressed. There are several tone marks (placed here on the letter $\hat{\mathfrak{o}}$):

These marks essentially override the normal tone rules and determine the tone of a syllable, depending on the class of the initial consonant.

There are five tones in Thai: Mid (M), Low (L), High (H), Rising (R), Falling (F). Table 6 is a reference for determining the tone of a syllable. Figure 1 shows a step-by-step process of how to determine the tone of a syllable.

There are two letters that can be placed in front of a consonant to alter the tone rules for a syllable: $\mathfrak d$ and $\mathfrak R$. When $\mathfrak d$ is placed in front of a consonant, then that syllable conforms to the tone rules for a *mid* class initial consonant. Likewise, when $\mathfrak R$ is placed in front of a consonant, then that syllable conforms to the tone rules for a *high* class initial consonant. For example:

		No Tone Mark					k
	T : C11-1-1-	Dead Syllable Short Vowel Long Vowel					
	Live Syllable				٧	ໜ	+
High	R	L			F		
Mid	M	L			F	Н	R
Low	M	H F			Н		

Table 6: Tone Rules for a Syllable Given the Class of the Initial Consonant

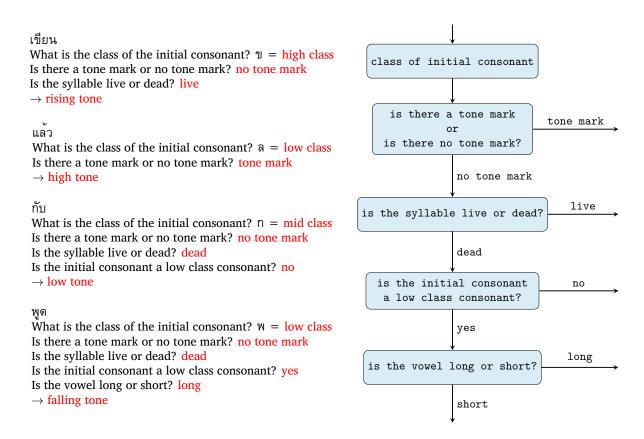


Figure 1: How to Determine the Tone of a Syllable

Final Notes on the Thai Script

There are a few other things to note about the Thai script that should be known by the reader, though it should be made clear that this is not an exhaustive list.

As previously stated, the Thai script is an abugida. When a vowel is not specified for a syllable in an abugida, a *default* vowel is used. The default vowel in Thai is /o/. So, when two consonants appear next to each other in a syllable without a vowel template, then an /o/ vowel should be used between them. For example (note that $/p^{-}/$ notates an unreleased /p/, and the accent mark on o indicates a high tone):

Sometimes, a consonant will appear "by itself" (bolded in the examples below)—there is no vowel template or no adjacent consonant indicating that the default vowel should be used. This generally occurs in words that are borrowed from Indic languages such as Sanskrit or Pali. In this case, the short vowel /a/ should be used after the consonant. For example:

The consonant 5 will occasionally be silent. This is only in a few words, so it's best to simply memorize them. For example:

When 3 is doubled (33) it represents different sounds: between consonants it represents the short vowel /a/ and at the end of a syllable it represents the sound /an/. For example:

Lastly, the mark $\hat{\mathfrak{d}}$ is placed over a consonant to indicate that that consonant is not pronounced. This mostly occurs in a loan words to preserve the spelling where that consonant would've been pronounced in the original language that the word was loaned from. For example:

As a final aside, much of the information presented in this document has been taken from a variety of sources freely available online and only serves as a consolidation of such information for the benefit of the reader.

Consonants

High Class				
ข	k^{h}			
પ્	\widehat{tc}^h			
ព / ត្ច*	t ^h			
И	p ^h			
ส / ศ / ษ	s			
ฝ	f			
ห	h			

Mid Class				
ก	k			
จ	îç			
ด / ฎ*	d			
ด / ฏ*	t			
บ	Ъ			
ป	p			
ව	ว			

Low Class							
ค / ฆ*	k^{h}	ม	m	ខ	j		
ช / ฌ*	$\widehat{t}\widehat{\boldsymbol{\varsigma}}^h$	น	n	ล / ฬ*	1		
ท / ฑ* / ฒ*	t ^h	গ	ŋ	ร	r		
พ/ภ	p ^h	ฮ*	h	3	w		
ฟ	f						

Vowels

Sho	rt	Lo	ng		With Consonant
กะ	ka	กา	ka:	กัก	kak
เกาะ	kə	กอ	kə:		
โกะ	ko	โก	ko:		
ก็	kw	กือ	kw:	ก็ก	kw:k
กุ	ku	ຖູ	ku:		
เกอะ	kə	เกอ	kə:	เกิก	kə:k
แกะ	kæ	แก	kæ:		
เกะ	ke	เก	ke:	เก็ก	kek
กิ	ki	ก็	ki:		

Close t	o Open	Open to Close			tween sonants
เกีย	kia	ไก	kai		
เกือ	kwa	ใก	kai		
กัว	kua	เกา	kau	กัก	kuak

Tones

	No Tone Mark			Tone Mark			
	Live Cullable	Dead Syllable					
	Live Syllable	Short Vowel	Long Vowel	'	e e	ຄນ	+
Higl	n R	L		L	F		
Mid	M	L		L	F	Н	R
Low	M	Н	F	F	Н		